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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,348	10/20/2003	Stephan Grunow	TI-36564	4206

23494	7590	09/20/2007
TEXAS INSTRUMENTS INCORPORATED		
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EXAMINER
MOVVA, AMAR

ART UNIT	PAPER NUMBER
2891	

NOTIFICATION DATE	DELIVERY MODE
09/20/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@ti.com  
uspto@dlemail.itg.ti.com

<b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b>	Application No. 10/689,348	Applicant(s) GRUNOW ET AL.	
	Examiner Amar Movva	Art Unit 2891	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 20 July 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 6 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: \_\_\_\_\_.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: \_\_\_\_\_.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.


Continuation of 11. does NOT place the application in condition for allowance because: Regarding applicant's arguments that claims 1-18 do not constitute new matter under 35 U.S.C 112, first paragraph, applicant states that portions of the specification, namely pg. 8 lines 4-17 provide the basis to overcome the new matter rejection. This argument is not persuasive. Examiner notes that applicant's independent claims state that the first contiguous barrier layer (70) is formed to thickness X1 over said upper surface (35) of the low K dielectric layer (20) within the trench and X2 on the sidewalls of the trench, wherein the ratio of X1 to X2 is 3:2. The applicable standard for determination of an instance of new matter is that the new claim matter is neither expressly or inherently disclosed.

Regarding the lack of express disclosure, Applicant's specification discloses a 3:2 ratio vis a vis X1:X2, wherein X1 refers to the barrier layer (70) on the upper surfaces (35) of the low K dielectric outside of the trench (see e.g. fig. 2a) and X2 is thickness on the sidewalls of the trench, thus applicant's disclosure only supplies support that the barrier layer is formed to a thickness X1 (ratio 3:2) outside of the trench. While it is possible to, in view of fig. 2a, to find support in applicant's disclosure that a portion of the contiguous barrier layer (70) is thicker in the trench than on the sidewalls of the trench it is not sufficient to support a claim that the ratio of X1 to X2 is 3:2 with X1 in the trench.

Furthermore disclosure ~~does~~ does not inherently show a 3:2 ratio since issues that would cause the thicker portion of 70 in the trench vis a vis thicker portion outside of the trench to vary (in PVD and CVD as specified in the specification as the methodology of depositing layer 70) would be poor step coverage depending on the specific materials of the deposition, a lack of knowledge as to what angles were used in the deposition, and whether or not the deposition may have had multiple steps with masks to isolate certain areas for deposition.

PLEASE NOTE: A new examiner, Amar Movva, has been assigned to this case. Applicant is advised to note the new contact information for the examiner:

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amar Movva whose telephone number is 571-272-9009. The examiner can normally be reached on 7:30 AM - 4:30 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bradley Baumeister can be reached on 571-272-1722. The fax phone number for the organization where this application or proceeding is assigned is 571- 273-8300



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